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Attorney Docket No.: 24024-505 CON

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PLICANT:

Peled et al.

SERIAL NUMBER:

10/774,843

EXAMINER:

Anne Marie Sabrina Wehbe

FILING DATE:

February 9, 2004

ART UNIT:

1633

For:

EXPANSION OF RENEWABLE STEM CELL POPULATIONS

Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Transmitted herewith for filing in the present application are the following documents:

- 1. Supplemental Information Disclosure Statement (2 pages), in duplicate;
- 2. Modified Form 1449/PTO (9 pages), in duplicate;
- 3. Copies of Cited References: B10-B23; C147- 282; and
- 4. Return Postcard.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 542-6000, Boston, Massachusetts.

The Commissioner is authorized to charge any fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311 Ref. No. 24024-505 CON. A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted,

Ivor R. Elrifi, Reg. No. 39,529 Attorney(s) for Applicants

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY and POPEO, P.C.

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Date: August 30, 2006

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed on the attached modified Form PTO-1449, as well as copies of the listed documents.

This Supplemental Information Disclosure Statement is being filed before the mailing date of a first Office Action based on the merits in the above-identified case. Accordingly, no fee or certification is believed required. By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A60-A141 and U.S. Published Applications A142-A148 are not submitted.

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and sign the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Supplemental Information Disclosure Statement, the Applicants make no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

APPLICANT:

Peled et al.

U.S.S.N.:

10/774,843

Notwithstanding any statements by the Applicants, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested.

Please charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 24024-505 CON.

Respectfully_submitted

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Date: August 30, 2006

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	
Filing Date	
First Named Inventor	
Group Art Unit	
Examiner Name	·
Attorney Docket Number	

U.S. PATENT DOCUMENTS

Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A60	3,687,808	08-29-1972	Merigan Jr. et al.			
	*A61	4,036,945	07-10-1977	Haber			
	*A62	4,331,647	05-25-1982	Goldenberg			
	*A63	4,469,863	09-4-1984	Ts'o et al.			
	*A64	4,476,301	09-9-1984	Imbach et al.		1	
	*A65	4,687,808	08-18-1987	Jarrett et al.			
	*A66	4,816,567	03-28-1989	Cabilly et al.			
	*A67	4,868,116	09-19-1989	Morgan et al.			
	*A68	4,946,778	07-7-1990	Ladner et al.			
=	*A69	4,980,286	12-25-1990	Morgan et al.			
	*A70	5,013,830	07-7-1991	Ohtsuka et al.			
	*A71	5,023,243	06-11-1991	Tullis		 -	
	*A72	5,034,506	07-23-1991	Summerton et al.			<u> </u>
	*A73	5,149,797	09-22-1992	Pederson et al.			
	*A74	5,166,315	11-24-1992	Summerton et al.			
	*A75	5,166,320	11-24-1992	Wu et al.		<u> </u>	
	*A76	5,177,196	05-5-1993	Meyer Jr. et al.		1	
	*A77	5,185,444	09-9-1993	Summerton et al.		† · · · · · · · · · · · · · · · · · · ·	
	*A78	5,188,897	02-23-1993	Suhadolnik et al.			
	*A79	5,214,134	05-25-1993	Weis et al.		 	
	*A80	5,216,141	01-1-1993	Benner		 	
	*A81	5,220,007	06-15-1993	Pederson et al.			
	*A82	5,235,033	08-10-1993	Summerton et al.			
	*A83	5,256,775	10-26-1993	Froehler		1	<u> </u>
	*A84	5,264,423	11-23-1993	Cohen et al.			
	*A85	5,264,562	11-23-1993	Matteucci		<u> </u>	

Express Mail No.: EV 869858285 US Page 2 of 9
Date of Deposit: August 30, 2006 Attorney Docket No.: 24024-505 CON

<u> </u>	*A86	5,264,564	11-23-1993	Matteucci		
	*A87	5,276,019	04-4-1994	Cohen et al.	 	
	*A88	5,278,302	01-11-1994	Caruthers et al.		
	*A89	5,286,717	02-15-1994	Cohen et al.	+	
	*A90	5,321,131	06-14-1994	Agrawal et al.		
	*A91	5,366,878	11-22-1994	Pedersen et al.		
	*A92	5,399,676	03-21-1995	Froehler		
	*A93	<u> </u>	04-4-1995	Walder et al.		
	<u> </u>	5,403,711	04-4-1993			
	*A94	5,405,938		Summerton et al.		
	*A95	5,405,939	04-11-1995	Suhadolnik et al.		
	*A96	5,434,257	07-18-1995	Matteucci et al.		
	*A97	5,453,496	09-26-1995	Caruthers et al.		
	*A98	5,455,233	03-3-1995	Spielvogel et al.		
	*A99	5,466,677	11-14-1995	Baxter et al.		
	*A100	5,466,677	11-14-1995	Baxter et al.		
	*A101	5,470,967	11-28-1995	Hule et al.		
	*A102	5,476,925	12-19-1995	Letsinger et al.		
	*A103	5,489,677	06-6-1996	Sanghvi et al.		
	*A104	5,491,133	02-13-1996	Walder et al.		
	*A105	5,519,126	05-21-1996	Hecht		
	*A106	5,536,821	07-16-1996	Agrawal et al.		
	*A107	5,539,082	07-23-1996	Nielsen et al.		
	*A108	5,541,306	07-30-1996	Agrawal et al.		
	*A109	5,541,307	07-30-1996	. Cook et al.		
	*A110	5,545,806	08-13-1996	Lonberg et al.		
	*A111	5,545,807	08-13-1996	Surani et al.		
	*A112	5,550,111	08-27-1996	Suhadolnik et al.		
	*A113	5,561,225	01-1-1996	Maddry et al.		
	*A114	5,563,253	08-8-1996	Agrawal et al.		
	*A115	5,565,350	10-15-1996	Kmiec		
	*A116	5,569,825	10-29-1996	Lonberg et al.		
	*A117	5,571,799	05-5-1996	Tkachuk et al.		
	*A118	5,587,361	12-24-1996	Cook et al.		
	*A119	5,596,086	01-21-1997	Mateucci et al.		
	*A120	5,602,240	02-11-1997	De Mesmaeker et al.		
-	*A121	5,608,046	04-4-1997	Cook et al.		
	*A122	5,610,289	03-11-1997	Cook et al.		
L	J	<u> </u>	ll			

Express Mail No.: EV 869858285 US

Date of Deposit: August 30, 2006

Page 3 of 9

Attorney Docket No.: 24024-505 CON

*A123	5,618,704	08-8-1997	Sanghvi et al.		
*A124	5,623,065	04-22-1997	Cook et al.		
*A125	5,623,070	04-22-1997	Cook et al.		
*A126	5,625,050	04-29-1997	Beaton et al.		
*A127	5,625,126	04-29-1997	Lonberg et al.		
*A128	5,633,360	05-27-1997	Bischofberger et al.		
*A129	5,633,425	05-27-1997	Lonberg et al.		
*A130	5,652,355	07-29-1997	Metelev et al.		
*A131	5,652,356	07-29-1997	Agrawal		
*A132	5,661,016	08-26-1997	Lonberg et al.		
*A133	5,663,312	02-2-1997	Chaturvedula		
*A134	5,677,437	10-14-1997	Teng et al.		
*A135	5,677,439	10-14-1997	Weis et al.		
*A136	5,700,922	12-23-1997	Cook		
*A137	5,714,331	03-3-1998	Buchardt et al.		
*A138	5,719,262	02-17-1998	Buchardt et al.		
*Á139	6,326,174	04-4-2001	Joyce et al.		
*A140	6,887,704	03-3-2005	Peled et al.	 	
*A141	6,962,698	08-8-2005	Peled et al.		

			U.S. PUI	BLISHED APPLICATION DOCUMENTS	150.3	19 19 19 19 19 19 19 19 19 19 19 19 19 1	onga organisa Stational
Exam Initials	Cite No.	U.S. Published Application No.	Published Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	*A142	2002/0114789	08-22-2002	Peled et al.			
	*A143	2004/0076603	04-22-2004	Peled et al.			
	*A144	2005/0031595	02-10-2005	Peled et al.			
	*A145	2005/0054097	03-10-2005	Peled et al.			
	*A146	2005/0054103	03-10-2005	Peled et al.			
	*A147	2005/0118150	02-2-2005	Peled et al.			
	*A148	2005/0214262	09-29-2005	Peled et al.			
	,	4		1	1	1	1

	FOREIGN PATENT DOCUMENTS					
Exam Initials	Cite No.	Foreiq Office	n Patent Document	Name of Patentee(s) or Applicant(s)	Date of Publication	Translatio Yes N
	B10	wo	89/02468	WHITEHEAD INSTITUTE FOR	03/23/89	
		i		BIOMEDICAL RESEARCH;		
		l		HOWARD HUGHES MED. INST.		
	B11	wo	89/05345	WHITEHEAD INSTITUTE FOR	06/15/89	
	-	ĺ		BIOMEDICAL RESEARCH;	i	ŀ
		<u> </u>		HOWARD HUGHES MED. INST.		
	B12	wo	89/07136	WHITEHEAD INSTITUTE FOR	08/10/89	
				BIOMEDICAL RESEARCH;		
		l		HOWARD HUGHES MED. INST.		

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Date of Deposit: August 30, 2006 Attorney Docket No.: 24024-505 CON

B13	wo	92/07573	SOMATIX THERAPY CORP.; HOWARD HUGHES MED. INST.; WHITEHEAD INST. FOR BIOMEDICAL; BRIGHAM & WOMEN'S HOSPITAL; N.E. CENTER HOSPITALS	05/14/92
B14	wo	97/41209	LEUVEN RES. & DEV. VZW	11/06/97
B15	wo	97/41224	AMCELL CORPORATION	11/06/97
B16	wo	99/18885	SANGOUARD ET AL.	04/22/99
B17	wo	03/062369 A2	GAMIDA-CELL LTD.	07/31/03
B18	wo	03/062404 A1	GAMIDA-CELL LTD.	07/31/03
B19	wo	03/078567 A2	GAMIDA-CELL LTD.	09/25/03
B20	wo	2004/016731 A2	GAMIDA-CELL LTD.	02/26/04
B21	WO	2004/078917 A2	GAMIDA-CELL LTD.	09/16/04
B22	AU	759522	GAMIDA-CELL LTD.;HADASIT MED. RES. SERV. DEV. LTD.	08/30/99
B23	AU	770896	GAMIDA-CELL LTD.;HADASIT MED. RES. SERV. DEV. LTD.	04/17/00

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C147	Acsadi et al. "Human Dystrophin Expression in Mdx Mice After Intramuscular Injection of DNA Constructs", Nature, 352: 815-818, 1991.
	C148	Armentano et al. "Expression of Human Factor IX in Rabbit Hepatocytes by Retrovirus-Mediated Gene Transfer: Potential for Gene Therapy of Hemophilia B", Proc. Natl. Acad. Sci. USA, 87: 6141-6145, 1990.
	C149	Banno et al. "Anemia and Neutropenia in Eldery Patients Caused by Copper Deficiency for Long-Term Eternal Nutrition", Rinsho-Ketsueki, English abstract only, 35: 1276-1281, 1994.
	C150	Belovari et al. "Differentiation of Rat Neural Tissue in A Serum-Free Embryo Culture Model Followed by In Vivo Transplantation", Croatian Medical Journal, 42(6): 611-617, 2001. Abstract.
	C151	Berkner "Development of Adenovirus Vectors for the Expression of Heterologous Genes", BioTechniques, 6(7): 616-629, 1988.
	C152	Bi et al. "Effect of Lactoferrin on Proliferation and Differentiation of the Jurkat Human Lymphoblastic T Cell Line", Arch. Immunol. Ther. Exp., 45(4): 315-320, 1997. Abstract.
	C153	Bird et al. "Single-Chain Antigen-Binding Proteins", Science, 242: 423-426, 1988.
	C154	Boerner et al. "Production of Antigen-Specific Human Monoclonal Antibodies From In Vitro-Primed Human Splenocytes", The Journal of Immunology, 147(1): 86-95, 1991.
	C155	Briddell et al. "Purification of CD34+ Cells Is Essential for Optimal Ex Vivo Expansion of Umbilical Cord Blood Cells", Journal of Hematotherapy, 6: 145-150, 1997.
	C156	Brigham et al. "Rapid Communication: In Vivo Transfection of Murine Lungs With A Functioning Prokaryotic Gene Using A Liposome Vehicle", The American Journal of the Medical Sciences, 298(4): 278-281, 1989.
	C157	Brugger et al. "Ex Vivo Expansion of Enriched Peripheral Blood CD34+ Progenitor Cells by Stem Cell Factor, Interleukin-1β (IL-1β), IL-6, IL-3, Interferon-γ, and Erythropoietin", Blood, 81(10); 2579-2584, 1993.
	C158	Brugnera et al. "Cloning, Chromosomal Mapping and Characterization of the Human Metal-Regulatory Transcription Factor MTF-1", Nucleic Acids Research, 22(15): 3167-3173, 1994.
	C159	Buskin et al. "Identification of A Myocyte Nuclear Factor That Binds to the Muscle-Specific Enhancer of the Mouse Muscle Creatine Kinase Gene", Molecular and Cellular Biology, 9(6): 2627-2640, 1989.
	C160	Cepko "Overview of the Retrovirus Transduction System", Short Protocols in Molecular Biology, Unit 9.10-9.14: 9-41 - 9-57, 1984.
	C161	Chen et al. "Fibroblast Growth Factor (FGF) Signaling Through PI 3-Kinase and Akt/PKB Is Required for Embryoid Body Differentiation", Oncogene, 19: 3750-3756, 2000. P.3752-3755.

Express Mail No.: EV 869858285 US Page 5 of 9
Date of Deposit: August 30, 2006 Attorney Docket No.: 24024-505 CON

Exam	Cite	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
Initials	No.	
	C162	Chowdhury et al. "Long-Term Improvement of Hypercholesterolemia After Ex Vivo Gene Therapy in LDLR-Deficient Rabbits", Science, 254: 1802-1805, 1991.
	C163	Colter et al. "CD34+ Progenitor Cell Selection: Clinical Transplantation, Tumor Cell Purging, Gene Therapy, Ex
	0.00	Vivo Expansion, and Cord Blood Processing", Journal of Hematology, 5: 179-184, 1996.
	C164	Cristiano et al. "Hepatic Gene Therapy: Adenovirus Enhancement of Receptor-Mediated Gene Delivery and
		Expression in Primary Hepatocytes", Proc. Natl. Acad. Sci. USA, 90: 2122-2126, 1993.
	C165	Curiel et al. "Adenovirus Enhancement of Transferrin-Polylysine-Mediated Gene Delivery", Proc. Natl. Acad.
		Sci. USA, 88: 8850-8854, 1991.
	C166	Dabeva et al. "Transcription Factor and Liver-Specific mRNA Expression in Facultative Epithelial Progenitor
		Cells of Liver and Pancreas", American Journal of Pathology, 147: 1633-1648, 1995. Abstract.
	C167	Dahl et al. "Tranformation of Hematopoietic Cells by the Ski Oncoprotein Involves Repression of Retinoic Acid
	<u>l</u> .	Receptor Signaling", Proc. Natl. Acad. Sci. USA, 95(19): 11187-11192, 1998.
	C168	Dai et al. "Gene Therapy Via Primary Myoblasts: Long-Term Expression of Factor IX Protein Following
		Transplantation In Vivo", Proc. Natl. Acad. Sci. USA, 89: 10892-10895, 1992.
	C169	Dalyot et al. "Adult and Neonatal Patterns of Human Globin Gene Expressioon Are Recapitulated in Liquid
	0.50	Cultures", Experimental Hematology, 20: 1141-1145, 1992.
	C170	Danos et al. "Safe and Efficient Generation of Recombinant Retroviruses With Amphotropic and Ecotropic Host
	0171	Ranges", Proc. Natl. Acad. Sci. USA, 85: 6460-6464, 1988.
	C171	Datta et al. "Ionizing Radiation Activates Transcription of the EGR1 Gene Via CArG Elements", Proc. Natl.
	C172	Acad. Sci. USA, 89: 10149-10153, 1992.
	01/2	Dexter et al. "Conditions Controlling the Proliferation of Haemopoietic Stem Cells In Vitro", Journal of Cell Physiology, 91: 335-344, 1976.
	C173	Ebner et al. "Distinct Roles for PI3K in Proliferation and Survival of Oligodendrocyte Progenitor Cells", Journal
	01/3	of Neuroscience Research, 62: 336-345, 2000. P.338-344.
	C174	Eglitis et al. "Gene Expression in Mice After High Efficiency Retroviral-Mediated Gene Transfer", Science, 230:
		1395-1398, 1985.
	C175	Englisch et al. "Chemically Modified Oligonucleotides as Probes and Inhibitors", Angewandte Chemie
		(International Edition in English), 30(6): 613-629, 1991.
	C176	Ferry et al. "Retroviral-Mediated Gene Transfer Into Hepatocytes In Vivo", Proc. Natl. Acad. Sci. USA, 88: 8377-
		8381, 1991.
	C177	Fibach et al. "Growth of Human Normal Erythroid Progenitors in Liquid Culture: A Comparison With Colony
		Growth in Semisolid Culture", International Journal of Cell Cloning, 9: 57-64, 1991.
	C178	Fibach et al. "Normal Differentiation of Myeloid Leukemic Cells Induced by Differentiation-Indicing Protein",
<u></u>	<u> </u>	Nature, 237: 276-278, 1972.
	C179	Fibach et al. "Proliferation and Maturation of Human Erythroid Progenitors in Liquid Culture", Blood, 73(1):
		100-103, 1989. Abstract.
	C180	Fibach et al. "Retinoic Acid Antagonist Inhibits CD38 antigen Expression on Human Hematopoietic Cells",
	0104	Blood, 100(11): 172A & 44th Annual Meeting of the American Society of Hematology, 2002. Abstract.
	C181	Fibach et al. "The Two-Step Liquid Culture: A Novel Procedure for Studying Maturation of Human Normal and
	C182	Pathological Erythroid Precursors", Stem Cells, 11(Suppl.1): 36-41, 1993. Abstract. Filvaroff et al. "Functional Evidence for An Extracellular Calcium Receptor Mechanism Triggering Tyrosine
	0102	Kinase Activation Associated With Mouse Keratinocyte Differentiation", The Journal of Biological Chemistry,
		269(34): 21735-21740, 1994.
	C183	Fishwild et al. "High-Avidity Human IgGk Monoclonal Antibodies From A Novel Strain of Minilocus Transgenic
		Mice", Nature Biotechnology, 14: 845-851, 1996.
	C184	Flores et al. "Akt-Mediated Survival of Oligodendrocytes Induced by Neuregulins", The Journal of Neuroscience,
		20(20): 7622-7630, 2000. P.7624-7629.
	C185	Flotte et al. "Expression of the Cystic Fibrosis Transmemebrane Conductance Regulators From A Novel Adeno-
		Associated Virus Promoter", The Journal of Biological Chemistry, 268(5): 3781-3790, 1993.
•	C186	Flotte et al. "Gene Expression From Adeno-Associated Virus Vectors in Airways Epithelial Cells", Amercan
		Journal of Respiratory Cell and Molecular Biology, 7: 349-356, 1992.

Express Mail No.: EV 869858285 US Page 6 of 9
Date of Deposit: August 30, 2006 Attorney Docket No.: 24024-505 CON

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	C187	Fosmire "Zinc Toxicity", American Journal of Clinical Nutrition, 51(2): 225-227, 1990. Abstract.
	C188	Gagnon et al. "Activation of Protein Kinase B and Induction of Adipogenesis by Insulin in 3T3-L1 Preadipocytes", Diabetes, 48: 691-698, 1999. P.693-697.
	C189	Gould-Fogerite et al. "Chimerasome-Mediated Gene Transfer In Vitro and In Vivo", Gene, 84: 429-438, 1989.
	C190	Gur et al. "Toelrance Induction by Megadose Hematopoietic Progenitor Cells: Expansion of Veto Cells by Short- Term Culture of Purified Human CD34+ Cells", Blood, 99: 4174-4181, 2002.
	C191	Haj-Ahmad et al. "Development of A Helper-Independent Human Adenovirus Vector and Its Use in the Transfer of the Herpes Simplex Virus Thymidine Kinase Gene", Journal of Virology, 57(1): 267-274, 1986.
	C192	Hatayama et al. "Regulation of HSP70 Synthesis Induced by Cupric Sulfate and Zinc Sulfate in Thermotolerant HeLa Cells", Journal of Biochemistry, Tokyo, 114(4): 592-597, 1993. Abstract.
	C193	Haylock et al. "Ex-Vivo Expansion and Maturation of Peripheral Blood CD34+ Cells Into the Myeloid Lineage", Blood, 80(5): 1405-1412, 1992.
	C194	Hermonat et al. "Use of Adeno-Associated Virus as A Mammalian DNA Cloning Vector: Transduction of Neomycin Resistance Into Mammalian Tissue Culture Cells", Proc. Natl. Acad. Sci. USA, 81: 6466-6470, 1984.
	C195	Herz et al. "Adenovirus-Mediated Transfer of Low Density Lipoprotein Receptor Gene Acutely Accelerates Cholesterol Clearence in Normal Mice", Proc. Natl. Acad. Sci. USA, 90: 2812-2816, 1993.
	C196	Heuchel et al. "The Transcription Factor MTF-1 Is Essential for Basal and Heavy Metal-Induced Metallothionein Gene Expression", The EMBO Journal, 13(12): 2870-2875, 1994.
	C197	Hoffman et al. "Zinc-Induced Copper Deficiency", Gastroenterology, 94(2); 508-512, 1988.
	C198	Hoogenboom et al. "By-Passing Immunisation. Human Antibodies From Synthetic Repertoires of Germline VH Gene Segments Rearranged In Vitro", Journal of Molecular Biology, 227: 381-388, 1992.
	C199	Huber et al. "Retroviral-Mediated Gene Therapy for the Treatment of Hepatocellular Carcinoma: An Innovative Approach for Cancer Therapy", Proc. Natl. Acad. Sci. USA, 88: 8039-8043, 1991.
	C200	Hutvágner et al. "RNAi: Nature Abhors A Double-Strand", Current Opinion in Genetics & Development, 12: 225-232, 2002.
	C201	Hwu et al. "Functional and Molecular Characterization of Tumor-Infiltrating Lymphocytes Transduced With Tumor Necrosis Factor-α cDNA for the Gene Therapy of Cancer in Humans", The Journal of Immunology, 150(9): 4104-4115, 1993.
	C202	Inbar et al. "Localization of Antibody-Combining Sites Within the Variable Portions of Heavy and Light Chains", Proc. Natl. Acad. Sci. USA, 69(9): 2659-2662, 1972.
	C203	Itoh et al. "Inhibition of Urokinase Receptor (uPAR) Expression by RNA-Cleaving Catalytic DNA (DNAzyme) Containing Antisense uPAR", Molecular Therapy, 5(5/Part 2): S134, 2002.
	C204	Jones et al. "Replacing the Complementarity-Determining Regions in A Human Antibody With Those From A Mouse", Nature, 321: 522-525, 1986.
	C205	Kaufman et al. "Translational Efficency of Polycistronic mRNAs and Their Utilization to Express Heterologous Genes in Mammalian Cells", The EMBO Journal, 6(1): 187-193, 1987.
	C206	Kay et al. "Hepatic Gene Therapy: Persistent Expression of Human α1-Antitrypsin in Mice After Direct Gene Delivery In Vivo", Human Gene Therapy, 3: 641-647, 1992.
	C207	Khachigian "DNAzymes: Cutting A Path to A New Class of Therapeutics", Current Opinion in Molecular Therapeutics, 4(2): 119-121, 2002.
	C208	Kim "Differentiation and Identification of the Two Catalytic Metal Binding Sites in Bovine Lens Leucine Aminopeptidase by X-Ray Crystallography", Proc. Natl. Acad. Sci. USA, 90(11): 5006-5010, 1993.
	C209	Kizaki et al. Regulation of Manganese Superoxide Dismutase and Other Antioxidant Genes in Normal and Leukemic Hematopoietic Cells and Their Relationship to Cytotoxicity by Tumor Necrosis Factor", Blood, 82(4): 1142-1150, 1993.
	C210	Köhler et al. "Defining Optimum Conditions for the Ex Vivo Expansion of Human Umbilical Cord Blood Cells. Influences of Progenitor Enrichment, Interference With Feeder Layers, Early-Acting Cytokines and Agitation of Culture Vessels", Stem Cells, 17(1: 19-24, 1999.

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Date of Deposit: August 30, 2006 Attorney Docket No.: 24024-505 CON

c	211	Koizumi et al. "Large Scale Purification of Human Blood CD34+ Cells From Cryopreserved Peripheral Blood
		Stem Cells, Using A Nylon-Fiber Syringe System and Immunomagnetic Microspheres", Bone Marrow
		Transplantation, 26: 787-793, 2000.
C	212	Lapidot et al. "Cytokine Stimulation of Multilineage Hematopoiesis From Immature Human Cells Engrafted in
		SCID Mice", Science, 255: 1137-1141, 1992.
C	213	Larrick et al. "PCR Amplification of Antibody Genes", Methods: A Companion to Methods in Enzymology, 2(2):
		106-110, 1991.
C	214	Lawlor et al. "Coordinate Control of Muscle Cell Survival by Distinct Insulin-Like Growth Factor Activated
		Signaling Pathways", The Journal of Cell Biology, 151(6): 1131-1140, 2000. P.1133-1139.
C	215	Lemarchand et al. "Adenovirus-Mediated Transfer of A Recombinant Human α1-Antitrypsin cDNA to Human Endothelial Cells", Proc. Natl. Acad. Sci. USA, 89: 6482-6486, 1992.
C	216	Lewandowski et al. "Phosphatidylinositol 3-Kinases Are Involved in the All-Trans Retinoic Acid-Induced
		Upregulation of CD38 Antigen on Human Haematopoietic Cells", British Journal of Hematology, 118(2): 535-
		544, 2002. Fig.8.
C	217	Li et al. "Activation of Phosphatidylinositol-3 Kinase (PI-3K) and Extracellular Regulated Kinases (Erk1/2) Is
	,	Involved in Muscarinic Receptor-Mediated DNA Synthesis in Neural Progenitor Cells", The Journal of
		Neuroscience, 21(5): 1569-1579, 2001. P.1572-1578.
C	218	Lonberg et al. "Antigen-Specific Human Antibodies From Mice Comprising Four Distinct Genetic
		Modifications", Nature, 368: 856-859, 1994.
C	219	Lonberg et al. "Human Antibodies From Transgenic Mice", International Review in Immunology, 13: 65-93,
		1995.
C	220	Lutton et al. "Zinc Porphyrins: Potent Inhibitors of Hematopoieses in Animal and Human Bone Marrow", Proc.
		Natl. Acad. Sci. USA, 94: 1432-1436, 1997.
C	221	Mader et al. "A Steroid-Inducible Promoter for the Controlled Overexpression of Cloned Genes in Eukaryotic
-	200	Cells", Proc. Natl. Acad. Sci. USA, 90: 5603-5607, 1993.
C	222	Manome et al. "Coinduction of C-Jun Gene Expression and Internucleosomal DNA Fragmentation by Ionizing
		Radiation", Biochemistry, 32: 10607-10613, 1993.
	223	Mar et al. "A Conserved CATTCCT Motif Is Required for Skeletal Muscle-Specific Activity of the Cardiac Troponin T Gene Promoter", Proc. Natl. Acad. Sci. USA, 85: 6404-6408, 1988.
C	224	Marks et al. "By-Passing Immunization. Human Antibodies From V-Gene Libraries Displayed on Phage", Journal
		of Molecular biology, 222: 581-597, 1991.
C	225	Marks et al. "By-Passing Immunization: Building High Affinity Human Antibodies by Chain Shuffling",
		Bio/Technology, 10: 779-783, 1992.
C	226	Martelli et al. "Transplants Across Human Leukocyte Antigen Barriers", Seminars in Hematology, 39(1): 48-56, 2002.
C	227	McLaughlin et al. "Adeno-Associated Virus General Transduction Vectors: Analysis of Proviral Structures",
		Journal of Virology, 62(6): 1963-1973, 1988.
C2	228	McNiece et al. "Action of Interleukin-3, G-CSF on Highly Enriched Human Hematopoietic Preogenitor Cells:
	[Synergistic Interaction of GM-CSF Plus G-CSF", Blood, 74: 110-114, 1989.
C2	229	McNiece et al. "CD34+ Cell Selection From Frozen Cord Blood Products Using the Isolex 300i and CliniMACS
	{	CD34 Selection Devices", Journal of Hematotherapy, 7: 457-461, 1998.
C	230	Migliaccio et al. "Long-Term Generation of Colony-Forming Cells in Liquid Culture of CD34+ Cord Blood Cells
		in the Presence of Recombinant Human Stem Cell Factor", Blood, 79: 2620-2627, 1992.
C2	231	Miller "Progress Toward Human Gene Therapy", Blood, The Journal of the American Society of Hematology,
		76(2): 271-278, 1990.
C2	232	Morier-Teissier et al. "Synthesis and Antitumor Properties of An Anthraquinone Bisubstituted by the Copper
	<u> </u>	Chelating Peptide Gly-Gly-L-His", Journal of Medical Chemistry, 36: 2084-2090, 1993. Abstract.
C2	233	Morrison "Success in Specification", Nature, 368(6474): 812-813, 1994.
C	234	Muench et al. "Interactions Among Colony-Stimulating Factors, IL-1\(\beta\), IL-6, and Kit-Ligand in the Regulation of
		Primitive Murine Hematopoietic Cells", Experimental Hematology, 20: 339-349, 1992.
C2	235	Muzyczka "Use of Adeno-Associated Virus as A General Transduction Vector for Mammalian Cells", Current
	l	Topics in Microbiology and Immunology, 158: 97-129, 1992.
		• • • • • • • • • • • • • • • • • • •

Express Mail No.: EV 869858285 US

Date of Deposit: August 30, 2006

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Attorney Docket No.: 24024-505 CON

C236	Narita et al. "Cardiomycyte Differentiation by GATA-4-Deficient Embryonic Stem Cells", Development, 122(19): 3755-3764, 1996.
C237	Neuberger "Generating High-Avidity Human Mabs in Mice", Nature Biotechnology, 14: 826, 1996.
C238	Nicolau et al. "Liposomes as Carriers for In Vivo Gene Transfer and Expression", Methods in Enzymology, 149(Chap.16): 157-176, 1987.
C239	Okazaki et al. "Characteristics and Partial Purification of A Novel Cytosolic, Magnesium-Independent, Neutral Sphingomyelinase Activated in the Early Signal Transduction of 10,25-Dihydroxyvitamin D3-Induced HL-60 Cell Differentiation", The Journal of Biological Chemistry, 269(6): 4070-4077, 1994.
C240	Oliveras et al. "Copper As An Essential Nutrient", Am. J. Clin. Nutr., 63:791S-796S, 1996.
C241	Pack et al. "Improved Bivalent Miniantibodies, With Identical Avidity as Whole Antibodies, Produced by High Cell Density Fermentation of Escherichia Coli", Bio/Technology, 11: 1271-1277, 1993.
C242	Percival et al. "Copper Is Required to Maintain Cu/Zn-Superoxide Dismutase Activity During HL-60 Cell Differentiation", Proc. Soc. Exp. Biol. Med., 203: 78-83, 1993.
C243	Petersen et al. "Hepatic Oval Cells Express the Hematopoietic Stem Cell Marker Thy-1 in the Rat", Hepatology, 27(2): 433-445, 1998.
C244	Pickart et al. "Growth Modulating Plasma Tripeptide May Function by Facilitating Copper Uptake Into Cells", Nature, 288(18/25): 715-717, 1980. Abstract. P.716, Col.2, Line1.
C245	Porter "The Hydrolysis of Rabbit γ-Globulin and Antibodies With Crystalline Papain", Biochemical Journal, 73: 119-126, 1959.
C246	Presta "Antibody Engineering", Current Opinion in Structural Biology, 2: 593-596, 1992.
C247	Purdy et al. "Large Volume Ex Vivo Expansion of CD34+-Positive Hematopoietic Progenitor Cells for Transplantation", Journal of Hematotherapy, 4: 515-525, 1995.
C248	Quantin et al. "Adenovirus as An Expression Vector in Muscle Cells In Vivo", Proc. Natl. Acad. Sci. USA, 89: 2581-2584, 1992.
C249	Reeves et al. "High Zinc Concentrations in Culture Media Affect Copper Uptake and Transport in Differentiated Human Colon Adenocarcinoma Cells", Journal of Nutrition, 126(6): 1701-1712, 1996. Abstract.
C250	Reid et al. "Interactions of Tumor Necrosis Factor With Granulocyte-Macrophage Colony-Stimulating Factor and Other Cytokines in the Regulation of Dendritic Cell Growth In Vitro From Early Bipotent CD34+ Progenitors in Human Bone Marrow", Journal of Immunology, 149(8): 2681-2688, 1992. Abstract. P.2686, Col.1, 2nd §, P.2682, Col.1, 2nd §.
C251	Riechmann et al. "Reshaping Human Antibodies for Therapy", Nature, 332: 323-327, 1988.
C252	Rosenfeld et al. "Adenovirus-Mediated Transfer of A Recombinant α1-Antitrypsin Gene to the Lung Epithelium In Vivo", Science, 252: 431-434, 1991.
C253	Rosenfeld et al. "In Vivo Transfer of the Human Cystic Fibrosis Transmembrane Conductance Regulator Gene to the Airway Epithelium", Cell, 68: 143-155, 1992.
C254	Rowley et al. "Isolation of CD34+ Cells From Blood Stem Cell Components Using the Baxter Isolex System", Bone Marrow Transplantation, 21: 1253-1262, 1998.
C255	Sammons et al. "Mechanisms Mediating the Inhibitory Effect of All-Trans Retinoic Acid on Primitive Hematopoietic Stem Cells in Human Long-Term Bone Marrow Culture", Stem Cells, 18(3): 214-219, 2000.
C256	Samulski et al. "Helper-Free Stocks of Recombinant Adeno-Associated Viruses: Normal Integration Does Not Require Viral Gene Expression", Journal of Virology, 63(9): 3822-3828, 1989.
C257	Sato et al. "In Vitro Expansion of Human Peripheral Blood CD34+ Cells", Blood, 82(12): 3600-3609, 1993.
C258	Sauve et al. "Mechanism-Based Inhibitors of CD38: A Mammalian Cyclic ADP-Ribose Synthetase", Biochemistry, 41(26): 8455-8463, 2002.
C259	Schwartz et al. "In Vitro Myelopoiesis Stimulated by Rapid Medium Exchange and Supplementation With Hematopoietic Growth Factors", Blood, 78(12): 3155-3161, 1991.
C260	Seed "An LFA-3 cDNA Encodes A Phospholipid-Linked Membrane Protein Homologous to Its Receptor CD2", Nature, 329: 840-842, 1987.
	Selden "Transfection Using DEAE-Dextran", Short Protocols in Molecular Biology, Unit 9.2: 9-9 - 9-11, 1984.
C261	Seiden Transfection Osing DEAE-Dextrair, Short Protocols in Molecular Biology, Onit 9.2. 9-9 - 9-11, 1984.

Express Mail No.: EV 869858285 US

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Date of Deposit: August 30, 2006

Attorney Docket No.: 24024-505 CON

C263	Slavin et al. "Donor Lymphocyte Infusion: The Use of Alloreactive and Tumor-Reactive Lymphocytes for Immunotherapy of Malignant and Nonmalignant Diseases in Conjunction With Allogeneic Stem Cell Transplantation", Journal of Hematotherapy & Stem Cell Research, 11: 265-276, 2002.
C264	Slavin et al. "Treatment of Leukemia by Alloreactive Lymphocytes and Nonmyeloablative Stem Cell Transplantation", Journal of Clinical Immunology, 22(2): 64-69, 2002.
C265	Spencer et al. "Controlling Signal Transduction With Synthetic Ligands", Science, 262: 1019-1024, 1993.
C266	Takeshita et al. "Selective Stimulation by Ceramide of the Expression of the α Isoform of Retinoic Acid and Retinoid X Receptors in Osteoblastic Cells", Journal of Biological Chemistry, 275(41): 32220-32226, 2000.
C267	Tratschin et al. "A Human Parvovirus, Adeno-Associated Virus, as A Eucaryotic Vector: Transient Expression and Encapsidation of the Procaryotic Gene for Chloramphenicol Acetyltransferase", Molecular and Cellular Biology, 4(10): 2072-2081, 1984.
C268	Tratschin et al. "Adeno-Associated Virus Vector for High-Frequency Integration, Expression, and Rescue of Genes in Mammalian Cells", Molecular and Cellular Biology, 5(11): 3251-3260, 1985.
C269	Tratschin et al. "Genetic Analysis of Adeno-Associated Virus: Properties of Deletion Mutants Constructed In Vitro and Evidence for An Adeno-Associated Virus Replication Function", Journal of Virology, 51(3): 611-619, 1984.
C270	Tuba et al. "Synthesis and Structure - Activity Relationships of Neuromuscular Blocking Agents", Current Medicinal Chemistry, 9: 1507-1536, 2002.
C271	Van Beusechem et al. "Long-Term Expression of human Adenosine Deaminase in Rhesus Monkeys Transplanted With Retrovirus-Infected Bone-Marrow Cells", Proc. Natl. Acad. Sci. USA, 89: 7640-7644, 1992.
C272	Verfaillie "Can Human Hematopoietic Stem Cells Be Cultured Ex Vivo?", Stem Cells, 12(5): 466-476, 1994. Abstract.
C273	Verfaillie "Direct Contact Between Human Primitive Hematopoietic Progenitors and Bone Marrow Stroma Is Not Required for Long-Term In Vitro Hematopoiesis", Blood, 79(11): 2821-2826, 1992.
C274 .	Verhoeyen et al. "Reshaping Human Antibodies: Grafting An Antilysozyme Activity", Science, 239: 1534-1536, 1988.
C275	Wall et al. "Inhibition of the Intrinsic NAD+ Glycohydrolase Activity of CD38 by Carbocyclic NAD Analogues", Biochemical Journal, 335(3): 631-636, 1998.
C276	Wang et al. "PH-Sensitive Immunoliposomes Mediate Target-Cell-Specific Delivery and Controlled Expression of A Foreign Gene in Mouse", Proc. Natl. Acad. Sci. USA, 84: 7851-7855, 1987.
C277	Whitlow et al. "Single-Chain Fv Proteins and Their Fusion Proteins", Methods: A Companion to Methods in Enzymology, 2(2): 97-105, 1991.
C278	Wilson et al. "Hepatocyte-Directed Gene Transfer In Vivo Leads to Transient Improvement of Hypercholesterolemia in Low Density Lipoprotein Receptor-Deficient Rabbits", The Journal of Biological Chemistry, 267(2): 963-967, 1992.
C279	Wilson et al. "Retrovirus-Mediated Transduction of Adult Hepatocytes", Proc. Natl. Acad. Sci. USA, 85: 3014-3018, 1988.
C280	Wolff et al. "Direct Gene Transfer Into Mouse Muscle In Vivo", Science, 247: 1465-1468, 1990.
C281	Wondisford et al. "Cloning of the Human Thyrotropin & Subunit Gene and Transient Expression of Biologically Active Human Thyrotropin After Gene Transfection", Molecular Endocrinology, 2: 32-39, 1988.
C282	Wu et al. "Receptor-Mediated Gene Delivery and Expression In Vivo", The Journal of Biological Chemistry, 263(29): 14621-14624, 1988.

^{*} By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A60-A141 and U.S. Published Applications A142-A148 are not submitted.

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